1

CLOSURE METHOD FOR DEVICES HAVING A STYLUS

RELATED APPLICATIONS

This application is related to a co-pending, commonly-owned U.S. Patent application Ser. No. 09/098,173, filed Jun. 16, 1998, entitled CLOSURE SYSTEM FOR DEVICES HAVING A STYLUS, and U.S. Patent application Ser. No. 09/100,376, filed Jun. 19, 1998, entitled SYSTEM AND METHOD FOR INDICATING WHEN A STYLUS OF A COMPUTER IS MISSING.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to computers and, more particularly, to a method and system for preventing the closure of a housing of a computer if a stylus of the computer is not secured within a receiver of the computer so as to prevent the loss of the stylus.

2. Description of the Related Technology

Many types of electronic devices such as calculators, personal planners, portable, handheld, or "palm-top," computers, for example, which are manufactured today, often use a stylus, otherwise known as a touch pen, in conjunction with a touch sensitive screen, to implement computer operations. For convenience, such devices will be referred to generically herein as "computers." With these computers, a user may select icons displayed on the touch-sensitive screen, for example, by touching the screen at appropriate locations with the stylus. The stylus is typically contained and held within a sleeve, channel, or other type of receiver, which is typically located within the housing of the computer. After a user has finished using the stylus, he or she can then insert the stylus into the sleeve for safekeeping and turn the computer off.

Unfortunately, as human beings sometimes tend to be forgetful, or become preoccupied or distracted during use of a computer, the stylus of prior art computers often becomes lost, or misplaced. Therefore, what is needed is a method and system for preventing the loss of a stylus of an electronic device such as a computer.

SUMMARY OF THE INVENTION

The invention addresses the above and other needs by providing a method and system for not allowing a computer to shut properly when a stylus of the computer is not seated properly in its holder.

In one embodiment of the invention, a method of closing a device having a stylus, includes: ositioning a first member of the device with respect to a second member of the device so as to place the first and second members in a closed configuration; receiving a stylus within a stylus channel coupled to the second member; and engaging a latch, coupled to the first member, with the stylus as the stylus is inserted into the stylus channel, thereby securing the first and second members in the closed configuration.

In another embodiment, a method of closing a device having a stylus, the device including a first member and a second member, coupled to the first member, includes preventing the first member from closing with respect to the second member when the stylus is not positioned within a stylus channel of the device.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a computer having a stylus, a channel for receiving the stylus therein, and a touch-sensitive screen, in accordance with one embodiment of the invention.

2

FIG. 2A is an elevational side-view of a computer, taken along lines 2—2 of FIG. 1, when the computer is in an open position.

FIG. 2B is an elevational side-view of a computer, taken along lines 2—2 of FIG. 1, when the computer is in a closed position.

FIG. 3 is a cross-sectional view of the computer of FIG. 1, taken along line 3—3 of FIG. 1 at approximately a longitudinal bi-section of a stylus channel of the computer.

FIG. 4 is a perspective view of a computer having a stylus, a channel for receiving the stylus therein, and a touch-sensitive screen, in accordance with another embodiment of the invention.

FIG. 5 is an elevational, cross-sectional view of the computer of FIG. 4, taken along lines 5—5 of FIG. 4.

FIG. 6A is a top plan view of an aperture and blocking member of the computer of FIG. 4 as configured when a stylus is not present within a stylus channel of the computer.

FIG. 6B is a top plan view of the aperture and blocking member of FIG. 6A, as configured when a stylus is inserted into the stylus channel of the computer.

FIG. 7 is an elevational, cross-sectional view of the computer of FIG. 4, taken along line 7—7 of that figure at a cross-section adjacent the location of the blocking member in the computer.

FIG. 8 is an elevational, cross-sectional view of the computer of FIG. 4, taken along line 8—8 of that figure, showing the position of the blocking member of the computer when the computer is in a closed position, and when the stylus is received within the stylus channel in accordance with one embodiment of the invention.

FIG. 9A is an elevational, cross-sectional view of the computer of FIG. 4 taken along line 8—8 of that figure, but illustrating another embodiment of a blocking member which is positioned adjacent an aperture so as to block a stop member from being received within the aperture.

FIG. 9B is an elevational, cross-sectional view of the computer illustrated in FIG. 9A, showing the relative positions of the blocking member, the stop member and a stylus received within a stylus channel, when the computer is in a closed position.

DETAILED DESCRIPTION OF THE INVENTION

The invention is described in detail below with reference to the figures, wherein like elements are referenced with like numerals throughout.

Referring to FIG. 1, a perspective view of a computer 100, designed in accordance with one embodiment of the invention, is illustrated. The computer 100 includes a first member or top 102 which provides a display screen 104 for displaying text, images, and graphical user interface (GUI) data to the operator of the computer 100. The computer 100 further includes a second member or base 106 that provides an alphanumeric keyboard 108 for receiving input from an operator of the computer 100. The first member 102 is coupled to the second member 106 by a hinge 110 that allows the first member 102 to swing away from the second member 106 when the computer is "opened" for use by an operator, and allows the first member 102 to swing toward the second member 106 so as to "close" the computer 100 when it is shut off and not being used by an operator. In one embodiment, the hinge 110 is spring-biased such that the first member 102 automatically swings away from the second member 106 when the first member 102 is not properly latched shut to the second member 106.